## Https Integration:

I have used a Https Server with Tektelic Network Server.

## HTTPS server:

https://messagesaver3000.herokuapp.com

- 1. Create and Configure the HTTPS Integration on NS:
  - Go to Applications -> Select the Application (where devices added)->Select "Manage Integrations"
  - Select "+" icon to "Add Integration".
  - Then Give name that you want.
  - Select "HTTP" as type.
  - Select one of the data converters, based on your sensor. In my case, I have selected "Home Sensor".
  - Then enter the host name (without http or https prefix) or IP address.
  - Then enter the port number. This port number should be opened and listened to https messages. (Make sure this port opened and listened properly on your https server In my case, I have used "443".
  - Base Path: you don't need to give this path. Unless you have an Application Server which has directory structure. In my case, I left as it is.
  - Select "HTTPS" checkbox to use HTTPS
  - Authentication Method: In my case, I do not have any authentication. So, I have used "No authentication". If you have any authentication then select "Basic Authentication" and enter the username and password.
  - Request Headers: I haven't used this option.
  - Then select "Add" button.

Please see the screenshot below:

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		HTTP URL puth
		/ap//v1/integration/http://d51/c8d411e0aba89dfeUbb4222335c
		Application address (iP or name without https prefix) * messaggesaver3000 herokumpp.com
		Port* 443
		Branabi
		Base para - /
		Enable HTTPS
		Authentication method*
		Request headers

2. Check is downlinks are received by HTTPS server

Trigger sensor to send some data and check is this uplink is received by HTTPS sensor:

https://messagesaver3000.herokuapp.com/list

["{payloadMetaData={applicationMetaData={id={entityType=APPLICATION, id=40bbe290-3e58-11e9b740-3f45498a159a}, customerId={entityType=CUSTOMER, id=e1298cd0-3059-11e9-8b0d-3f45498a159a}, subCustomerId=null, name=Euristiq app test}, gatewayMetaDataList=[{id={entityType=GATEWAY, id=9b642160-d563-11e9-b191-d9ad92d3bef8},

name=micro, mac=647FDAFFFE0078DE, latitude=3.0, longitude=4.0, altitude=5.0, rxInfo={channel=1, codeRate=4/5, crcStatus=1, dataRate={modulation=LORA, spreadFactor=12, bandwidth=125}, frequency=867300000, loRaSNR=10.0, mac=647fdafffe0078de, rfChain=0, rssi=-54, size=20, time=0001-01-01T00:00:00Z, timestamp=13032708, rsig=null, antenna=0}]],

deviceMetaData={id={entityType=DEVICE, id=8fd8daa0-0170-11ea-8b47-7191fd16760e}, name=217, deviceClass=CLASS\_A, deviceEUI=647FDA000000DB8, appEUI=647FDA8010000100}, fcount=19, adr=true, fport=10}, payload={inputCounter=1, input=false}}"]

IMPORTANT: HTTPS server should send response to NS, once it receives payload. Then only you will be able to see payloads continuously from NS.

To clear list of received packets just use this link: https://messagesaver3000.herokuapp.com/clear

## 3. Sending Downlink message via HTTPS Integration:

The following tool is required to send downlink message to the Device.

Tool- Insomnia

1. To send Down link, Tektelic Network Server address and HTTP url path (you can find it in HTTP Integration) are required.

← → C 🔒 https://lorawan-r	ns-dev.tektelic.com/applications/40bbe290-3e58-11e9-b740-	-3f45498a159a/integrations	🖈 🚺 😁 🕓
🔛 Apps 📓 Every Time Zone: G	Calendar 2019/1 🤣 Play Музика 💧 General Informat	📓 Oles Kulchytskyy 🖿 НА 🖿 Tektelic 🖿 SecureKey 🎦 Transmission WE 🛥 The Things Netw 🐠 Каталог 🚹 Умные шторы с 👶 res	in.io   misty-p
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1 ALARMS		Tektelic Home Sensor	
		HTTP UR, path /api/v1/integration/http/7d517c8d41fe6a6a89dfe0bb4222335c Application address (IP or name without http or https prefit)* messagesover3000.herokuspp.com Pot* 43 Base path* / Enable HTTPS Authentication method* No outhentication	

 Then you can combine NS address and HTTP URL Path like this: <u>https://lorawan-ns-</u>

dev.tektelic.com:443/api/v1/integration/http/7d517c8d41fe6a6a89dfe0bb4222335c

3. Then you can enter this URL in "Insomnia" and set method as "POST". Then add the body

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Application Edit View Window Tools Help							
POST 👻	https://lorawan-ns-dev.tektelic.com:443/api/v1/integration/http/7d517c8d41fe6a6a89dfe0bb4222335c	Send	200 TIME 778 ms SIZE 0 B		Just Now 👻		
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17 <b>{</b> 2 3 4 5	"=03[2 <sup>-1</sup> "1 <sup>2</sup> ", "=012"[:"" <b>4FTTDessee0000000",</b> "dita":"(('garami'',(('data'':\'kqui',\'port\":200))"		NAME X-Content-Type-Options				
o }			X-XSS-Protection	1; mode=block			
			Pragma	no-cache, no-score, max-age=0, muscrevaluace			
			Expires				
			Content-Length				
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with correct values (JSON type) and select send button. After this the downlink will be sent.

JSON Format:

4. You should be able see the Downlink message in Downlink Queue tab.

